

Remarks

Responsive to the Final Office Action of May 17, 2002, the applicant has amended claims 1, 7, 9, 18, 26, 31, 44 and 47. In addition, detailed arguments in support of patentability of the claims are presented and re-examination is respectfully requested.

35 U.S.C. § 112 Rejections

Claims 44 and 47 were rejected under 35 U.S.C. § 112, first paragraph as containing subject matter not described in the specification to reasonably convey to one skilled in the art at the time the application was filed that the inventor had possession of the claimed invention. In particular, the claims contain the limitation that an angle between the front side and one of the sides of the deck is formed between about 12 o'clock and 2 o'clock position. The Examiner stated this was not disclosed in the original specification or drawings. However, referring to Figure 3a of the specification, the angle in which the hinge 110 is attached to the two sides is clearly shown as extending between about the 12 o'clock and the 2 o'clock position. This is evident from the enclosed drawing. When applying a protractor to the drawing, the Examiner will see that the two o'clock position corresponds to 30°, the one o'clock to 60° and the twelve o'clock to 90°. Thus, it is respectfully submitted, this rejection should be withdrawn.

35 U.S.C. § 103 Rejections

Claims 1, 2, 5-10, 13, 15, 16, 18, 19, 23, 24 and 31-47 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Thagard (U.S. Patent No. 5,765,348) in view of prior art Figure 2A of the present specification. The Examiner stated that Thagard discloses the claimed invention including a deck (172) having at least three

sides and at least one side wall, cutting blade 240 mounted on the deck, guard assembly 360 including an actuating member 380 and a guard 366 on the front of the mower, and a movable rubber flap 364 (column 8, line 51, 52 of the specification). The Examiner indicated that Thagard failed to disclose providing a guard along two of at least three sides of the deck. Referring to Figure 2A of the present application, the Examiner contended that a mower deck is shown with a guard along two sides of the deck. The Examiner stated that it would have been obvious to one of ordinary skill in the art at the time of the invention to place the guard of Thagard along two of the sides of the deck as shown in Figure 2A of the present specification to provide better access to the mower blade when cutting brush.

The Examiner further stated that with regards to claims 2, 6, 7, 10 and 19, the actuating member of Thagard is a hydraulic cylinder and piston 382. The actuating member is shown mounted to the deck and the guard is spaced from the hinge. With regards to claims 8, 15, 23 and 24 the top surface of the deck and a portion of the top surface of the guard were said to be in the same plane and a portion not in the same plane (see Figure 3).

The applicant respectfully traverses this rejection. Figure 2A of the specification shows a prior art mower guard. Referring to page 8, lines 12-20 of the present specification, Figure 2A shows a swinging guard. More particularly, guard 30 swings rearward above blades 32 and below a mower deck 34. In other words, the guard retracts into the housing below the mower deck 34 and above the blades 32. When the guard is in its extended or forward position, there is nothing depending downward from it in a vertical direction to prevent the blades from throwing foreign objects. If there were, the guard of Figure 2A could not swing or pivot to a location that is

below the deck and above the blades. The guard 30 of Fig. 2A is not pivotable to a location above the deck. A hinge on two sides of the deck would not permit the swinging guard to operate as intended since it could not then retract beneath the deck 34. Thus, Figure 2A does not teach the use of a hinge extending at an angle in relation to two sides of a deck. Accordingly, it would not have been obvious to combine the guard of Figure 2A with Thagard's guard system. If Thagard's movable rubber flap 364 or guard 366 were secured to the guard of 30 of Figure 2A, then the guard could no longer swing beneath the mower deck 34--thus destroying its function.

Furthermore, the Thagard guard has a folding shroud 360 which is pivotably and movably attached to frame 110 by four spaced hinges 363 (Fig. 3) which are oriented along only one side (the rear side) of the mower. Thagard does not disclose or suggest adapting the shroud to be attached at an angle in relation to two sides of the mower. In order to be attached at an angle in relation to two sides of the mower deck, the shroud would have to be mounted on hinges extending at an angle to two sides of the mower deck. In that situation, several of the hinges 363 of the Thagard device would have to be removed or eliminated, or all the hinges would need to be repositioned, since two hinges for the shroud cannot extend along two separate planes. Thus, it is would not have been obvious to modify the Thagard device to have a hinge extending at an angle in relation to two sides of the mower guard. The only motivation for doing so is found in the instant application.

Claim 1 has been amended to recite that the guard is pivotably attached to the deck via a hinge which extends at an angle in relation to two sides of the deck. Claim 1 as amended is patentable over Thagard in view of Figure 2A and is in condition for allowance. Furthermore,

claims 2-5 and 7-8 and 38 dependent thereon are also in condition for allowance.

Claims 9, 18 and 31 have been amended to recite that the hinge is disposed at an angle with respect to the two deck sides. Thagard does not teach or suggest a hinge mounted at an angle to two sides of the deck. Accordingly, claim 9 and claims 10-17 and 39 dependent thereon, claim 18 and claims 19-25 and 40 dependent thereon, and claim 31 and claims 32-34 dependent thereon are in condition for allowance. Claim 35 recites that the hinge extends at an obtuse angle in relation to sides of the deck adjacent opposed ends of the hinge. Neither Thagard nor Fig. 2A disclose or suggest a hinge extending at an obtuse angle, and it would not have been obvious to combine Figure 2A with Thagard to achieve this result. Thus, claims 35 and 36-37 dependent thereon are in condition for allowance.

Claims 41 and 45 also call for a hinge extending at an angle between the front side and one of the sides of the deck. This is not taught by Thagard, or the combination of Thagard with Fig. 2A. Thus, claims 41 and 42-44 dependent thereon and claim 45 and claims 46-47 dependent thereon are in condition for allowance.

Claims 1, 3, 4, 6, 9, 11-14, 16-18, 20, 21 and 24-31 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gullett (U.S. Patent No. 4,378,668) in view of Thagard. The Examiner stated that Gullett disclosed a mower head including a deck 14 having at least four sides, sidewalls, guard 24, and an actuating member 23, 27. The Examiner noted that Gullett disclosed a rigid wall instead of a flap. The Examiner stated that Thagard makes a downward wall of the guard a flap 364 and it would have been obvious to replace the guard of Gullett with a flap of Thagard to provide a movable guard that protects the operator from debris.

Gullett discloses guards 20, 22, 24 which are connected along only one of their sides by hinges 29, 31, 33 to a deck 18. Like Thagard, Gullett does not teach or suggest a hinge which extends at an angle in relation to two sides of the mower. Furthermore, it would not have been obvious to combine Gullett with Thagard which has a hydraulic cylinder to move the guard assembly. Gullett simply uses cables 23 and levers 27 which pull the guards in an upward direction.


Claims 1, 9, 18, 26 and 31 have been amended to each recite that a hinge extends at an angle in relation to two of at least three sides of the deck. As previously discussed, neither Thagard nor Gullett teaches or suggests a hinge connected at an angle in relation to two sides of the deck or a hinge mounted at an angle with respect to two sides. Accordingly, claim 1 and claims 2-5, 7-8 and 38 dependent thereon, claim 9 and claims 10-17 and 39 dependent thereon, claim 18 and claims 19-25 and 40 dependent thereon, claim 26 and claims 27-30 dependent thereon and claim 31 and claims 32-34 dependent thereon are in condition for allowance.

CONCLUSION

All formal and informal matters have been addressed, it is respectfully submitted that this application is now in condition for allowance. It is believed that the proposed claim changes place the application in condition for allowance or in better condition for appeal. Accordingly, entry of the amendment is respectfully requested. Early notice to that effect is earnestly solicited.

Respectfully submitted,

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MARKED-UP VERSION OF THE AMENDED CLAIMS

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IN THE CLAIMS:

Please cancel claim 6.

Please amend claims 1, 7, 9, 18, 26, and 31 as follows:

1. (Twice Amended) A mower head comprising:
a deck having at least three sides and at least one side wall depending from said deck;
at least one cutting blade rotatably mounted to
5 said deck on an axis extending through said deck, said deck being disposed above and generally parallel to said blade; and
a guard assembly comprising:
an actuating member mounted on said deck,
10 a guard attached to said actuating member and pivotally attached to said deck via a hinge which is mounted to said deck and extends at an angle in relation to [along] two of said at least three sides of said deck, and
15 a flap depending from said guard and movable in relation to said guard, said flap being oriented in a plane spaced from a plane of said guard.

7. (Twice Amended) The mower head of claim [6] 1 wherein said actuating member is mounted on said deck at a location spaced from said hinge.

9. (Twice Amended) A mower head comprising:
a deck having at least three sides;
at least one cutting blade rotatably mounted to
5 said deck on an axis extending through said deck, said deck being disposed above and generally parallel to said blade; and

a guard assembly comprising:
an actuating member mounted on said deck,
a hinge extending between two of said at
10 least three sides of said deck at an angle with respect to
said two of said at least three sides,
a guard attached to said actuating member
and pivotally attached to said deck via said hinge, and
a flap which depends from said guard and is
15 movable in relation to said guard, said flap being
oriented in a plane spaced from a plane of said guard.

18. (Thrice Amended) A mower head comprising:
a deck comprising:
at least four sides, and
three side walls, one depending from each
5 of three of said at least four sides, wherein two of said
three side walls are rigid;
at least one cutting blade rotatably mounted to
said deck on an axis extending through said deck, said
deck being disposed above and generally parallel to said
10 blade; and
a guard assembly comprising:
an actuating member mounted on said deck,
a hinge extending at an angle in relation
to [between] two adjacent ones of said at least four
15 sides of said deck,
a guard attached to said actuating member
and pivotally attached to said deck via said hinge, and
a flap which depends from said guard and is
movable in relation to said guard, said flap being
20 oriented in a plane spaced apart from a plane of said
guard.

26. (Twice Amended) A mower head comprising:
a deck having at least three sides;

at least one cutting blade rotatably mounted to
said deck on an axis extending through said deck, said
5 deck being disposed above and generally parallel to said
blade; and

a guard assembly comprising:

an actuating member mounted on said deck;
a guard pivotally attached to said deck at
10 an obtuse angle, via a hinge, in relation to sides of said
deck which are adjacent opposed ends of said guard, said
guard including a first wall which comprises an
approximately straight edge and a second wall which
comprises a plurality of angled sections, and

15 a flap which depends from said guard and is
oriented in a plane spaced apart from the plane of said
guard.

31. (Twice Amended) A mower head comprising:

a deck having at least three sides;

at least one cutting blade rotatably mounted to
said deck on an axis extending through said deck, said
5 deck being disposed above and generally parallel to said
blade;

a guard assembly comprising:

a hinge extending at an angle between two
of said at least three sides of said deck,

10 a guard pivotally attached to said deck via
said hinge;

a holding member for holding said guard in
one rotational position in relation to said deck; and

a flap extending from said guard and
15 movable in relation to said guard, said flap being
oriented in a plane spaced apart from a plane of said
guard.